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THE SPACE SYSTEM "METEOR" SERVES METEOROLOGISTS

(TASS)

8 JUNE 1967

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GENERAL MANAGEMENT OF THE HYDROMETEOROLOGICAL SERVICE AT THE COUNCIL OF MINISTERS OF THE USSR (*)

Tass Communique

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At present two meteorological satellites are in orbit. They form alongside with the point of reception and distribution of meteorological information the experimental cosmic meteorological system "METEOR".

The General Management of the Hydrometeorological service have examined the results of observations carried out with the aid of two artificial satellites of the Earth "KOSMOS-144" and "KOSMOS-156" concomitantly with the representative of industrial organizations.

As already communicated by TASS on 27 April 1967, "KOSMOS-156" was placed in the orbit on that day. This satellite, as well as AES "KOSMOS-144", launched on 28 February 1967, conducts a broad programme of meteorological observations.

The satellite is equipped with the following instrumentation:

- a television apparatus designed for the registration of images of clouds, snow and ice covers on the daytime side of the Earth;

- an infrared apparatus for the registration of images of cloud, snow and ice covers on the illuminated and shadow sides of the Earth;

- an actinometric apparatus for the registration of the intensity of the Sun-Atmosphere system-emitted radiation, and also for measurement of the temperature of clouds and underlying surface.

The registration of meteorological information is realized by airborne devices with memorizing and subsequent transmission to ground stations.

(*) From newspaper "PRAVDA" of 4 June 1967

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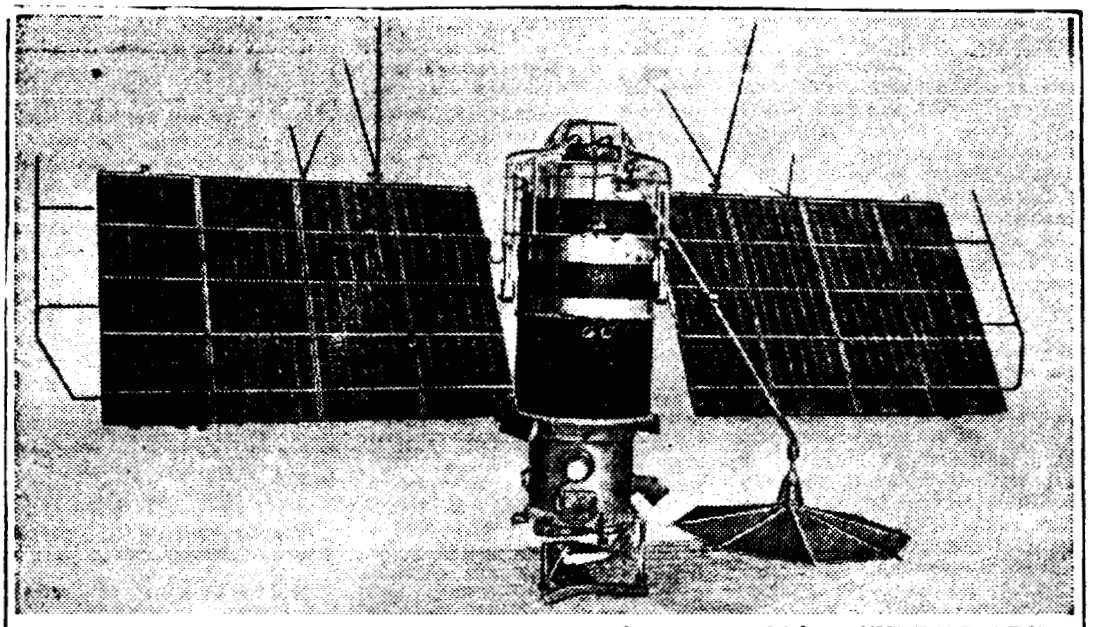

Метеоспутник «Космос-156». (ТАСС). Meteorological satellite "KOSMOS-156" Photo Tass

Fig.1

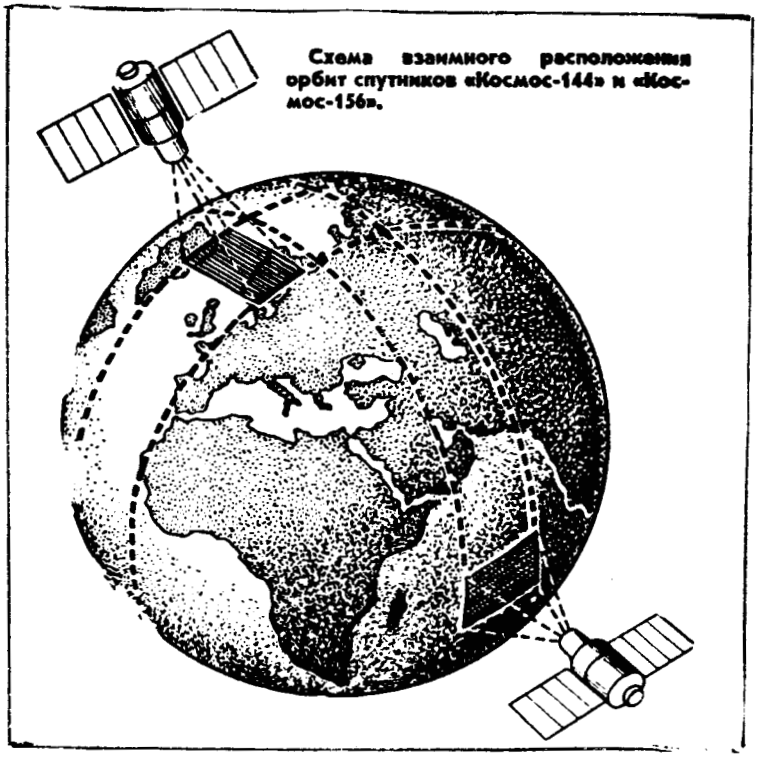

Fig.2

Sketch showing the mutual positions of the meteorological satellites "KOSMOS-144" and "KOSMOS-156"

In order to ensure the geographic orientation of meteorological informa= tion, functional systems are installed on the satellite, materializing a constant and precise orientation of the satellite at the Earth and in the direction of flight, and also the synchronization of all registering and memorizing devices.

The satellite's airborne apparatus is provided with electric energy by means of solar batteries (cells) with autonomous system of orientation at the Sun, and chemical batteries with the required automation.

The satellite is also provided with radiotelemtric systems and systems assuring precise measurements of orbit elements.

The reception of meteorological data from both satellites is conducted by a network of especially created ground stations, equipped with means of registration and processing of the information received, which are connected with the Hydrometeorological Center of the USSR by direct channels.

The deciphering, geographical orientation and the processing of meteorological information at points of reception, namely of television, infrared and actinometric data, are then performed with the aid of automatic devices and computers.

The apparatus installed on board Kosmos-144 and Kosmos-156, constitute alongside with the ground reception installations, the experimental cosmic meteorological system "METEOR".

The experimental system "METEOR" is designed for regular collection of meteorological information that will be received by the Hydrometeorological Center of the USSR for processing. It is to be utilized for an operational weather service for the benefit of peoples' agriculture and for international exchange.

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Translated by ANDRE L. BRICHANT

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